

## Claims

1.-7. (cancelled)

8. (new) A receiver for an angle-modulated optical signal at a light frequency, which is injected into an optical resonator, wherein

the optical resonator is preceded by an optical coupling-out device for reflected light from the optical resonator, wherein

the optical coupling-out device is followed by an opto-electric transducer, and wherein, to determine a phase of the optical signal, the optical resonator has a resonance frequency which is tuned to the light frequency.

9. (new) The receiver according to Claim 8, wherein the optical resonator is a Fabry-Perot resonator.

10. (new) The receiver according to Claim 8, wherein the optical coupling-out device comprises a circulator connected preceding the optical resonator and whose output is connected to the opto-electric transducer.

11. (new) The receiver according to Claim 9, wherein the optical coupling-out device comprises a circulator connected preceding the optical resonator and whose output is connected to the opto-electric transducer.

12. (new) The receiver according to Claim 8, wherein the optical coupling-out device comprises a polarization beam splitter with a following polarization plate so that the angle-modulated optical signal and the reflected light have different polarizations which can be separated by the polarization beam splitter.

13. (new) The receiver according to Claim 9, wherein the optical coupling-out device comprises a polarization beam splitter with a following polarization plate so that the angle-modulated optical signal and the reflected light have different polarizations which can be separated by the polarization beam splitter.

14. (new) The receiver according to Claim 8, wherein a second opto-electric transducer is connected following the optical resonator in order to increase the sensitivity at the first opto-electric transducer.

15. (new) The receiver according to Claim 9, wherein a second opto-electric transducer is connected following the optical resonator in order to increase the sensitivity at the first opto-electric transducer.

16. (new) The receiver according to Claim 10, wherein a second opto-electric transducer is connected following the optical resonator in order to increase the sensitivity at the first opto-electric transducer.

17. (new) The receiver according to Claim 12, wherein a second opto-electric transducer is connected following the optical resonator in order to increase the sensitivity at the first opto-electric transducer.

18. (new) The receiver according to Claim 8, further comprising a coding for assigning a phase variation by the light reflected and as the case may be transmitted by the optical resonator.

19. (new) The receiver according to Claim 9, further comprising a coding for assigning a phase variation by the light reflected and as the case may be transmitted by the optical resonator.

20. (new) The receiver according to Claim 10, further comprising a coding for assigning a phase variation by the light reflected and as the case may be transmitted by the optical resonator.

21. (new) The receiver according to Claim 12, further comprising a coding for assigning a phase variation by the light reflected and as the case may be transmitted by the optical resonator.

22. (new) The receiver according to Claim 14, further comprising a coding for assigning a phase variation by the light reflected and as the case may be transmitted by the optical resonator.

23. (new) A receiver for an angle-modulated optical signal having a light frequency, the receiver comprising:

- an optical resonator fed by the angle-modulated optical signal;

- an optical uncoupling mechanism arranged upstream of the optical resonator for light reflected from the optical resonator; and

- an opto-electric converter arranged downstream of the optical uncoupling mechanism, wherein

- the optical resonator has a resonance frequency adjusted to the light frequency for determining a phase of the optical signal.

24. (new) The receiver according to Claim 23, wherein the optical resonator is a Fabry-Perot resonator.

25. (new) The receiver according to Claim 23, wherein the optical uncoupling mechanism comprises a circulator arranged upstream of the optical resonator, and wherein an output of the circulator is connected to the opto-electric converter.

26. (new) The receiver according to Claim 23, wherein the optical uncoupling mechanism comprises a polarization beam splitter with a following polarization plate so that the angle-modulated optical signal and the reflected light have different polarizations which can be separated by the polarization beam splitter.

27. (new) The receiver according to Claim 23, further comprising a second opto-electric converter arranged downstream of the optical resonator for increasing sensitivity.